

CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley

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Migratory Birds Starving in Maine, Biologists See Ties to Climate Change



Over the past few years, biologists have counted thousands of Arctic tern chicks that starved to death in the Maine Coastal Islands National Wildlife Refuge because the herring their parents feed them have vanished. A bulletin released recently by the U.S. Fish and Wildlife Service (FWS) blames a twofold problem: commercial fishing is reducing the birds' food source, and climate change is causing fish to seek colder waters. "We've seen a 40 percent decline of Arctic terns in the last 10 years," said FWS biologist Linda Welch. Biologists are not sure whether herring sought colder waters elsewhere or went deeper, but they are no longer on the surface, from which the terns pluck them. Arctic terns cannot dive deep for food like other birds, and tern chicks are starving to death because they cannot swallow the larger fish brought by their parents, Welch said. Fish and other sea life that crave colder water have been swimming to the Earth's poles, abandoning areas like the warming Gulf of Maine. In a recently published study, University of British Columbia scientists found that significant numbers of the 968 species of fish and invertebrates they examined have fled from the warming waters of their original habitats over the past four decades. (WaPo)

Mayors Aim for Resilience to Weather, Energy Challenges

More than four dozen mayors and county leaders have signed a pledge to make their communities more resilient to increasingly severe floods, droughts, extreme storms, wildfires, and other effects of climate change. The recently launched Resilient Communities for America Agreement lays out steps local governments can take to adapt to extreme weather and energy challenges, and calls for more action and support from state and federal leaders. "Local governments have always been the leaders on climate action, but we need more support from the federal government," said Mayor Frank Cownie of Des Moines, which saw severe flooding in 2008, a trio of "500-year" floods in 2010, a drought in 2012, and the wettest year on record so far in 2013. "We need better local-federal coordination on disaster preparedness, and we need them to address our aging and inadequate infrastructure, which has been under-funded for far too long." "Focusing on preparedness is incredibly cost-effective. For every \$1 spent on disaster preparedness, a community can save \$4 in avoided costs," said Jason Hartke, VP of National Policy for the U.S. Green Building Council. (Reuters/ICLEI USA)

Climate Change Threatens Food Security, Economic Growth

A new World Bank report warns that climate change will increasingly threaten the food security and livelihoods of millions of the world's poorest people in the coming decades. The study looked at the likely effects of climate change due to present warming and future temperature increases expected to occur absent major reductions to greenhouse gas emissions. Climate-related extreme events are already pushing vulnerable households below the poverty threshold and will make economic growth and poverty eradication increasingly difficult as temperatures continue to rise. By the 2030s, 40 to 80 percent of the land used to grow maize in Sub-Saharan Africa will be unable to sustain crops due to drought and heat, while sea-level rise and increased tropical storms could inundate much of Bangkok, Thailand and low-lying islands and coastal cities. "In the near-term, climate change, which is already unfolding, could batter the slums even more and greatly harm the lives and the hopes of individuals and families who have had little hand in raising the Earth's temperature," said World Bank President Jim Yong Kim. (EESI)

GHGs Could Cause More Frequent El Niño and La Niña Events

New research suggests that the greenhouse gases (GHGs) that fuel climate change might also affect the El Niño/Southern Oscillation (ENSO) cycle. El Niño and La Niña—recurrent climate phenomena that lead to extreme weather events—occur when the equatorial Pacific Ocean reaches above- or below-average temperatures. The researchers looked at 2,222 tree-ring samples from around the world to create a record of the ENSO cycle dating back to the year 1300. Their findings strengthen earlier claims that ENSO events have occurred more often since the Industrial Revolution (which spurred a significant increase in human-related GHG emissions) suggesting that human-caused climate change may be linked to these destructive weather events. This finding was reinforced when the team compared its data with the dates of major volcanic eruptions, observing a pattern of increased ENSO signals in the years following eruptions. Volcanic eruptions emit aerosols with qualities similar to GHGs. "They both disturb the radiation balance of the Earth," said lead author Jinbao Li. "So if the El Niño system responds to volcanic eruptions, it means it will also respond to increases in GHGs." (ClimateWire/ncimate1936) *Shelby*